

# **NITRATE**

## **COMPLIANCE SAMPLING COLLECTION GUIDE**

Kansas Public Water Supply Systems  
using the  
Kansas Health and Environmental Laboratories



Prepared by  
Kansas Department of Health and Environment  
Bureau of Water  
Public Water Supply Section

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## NITRATE SAMPLING

Nitrate monitoring is part of the Inorganic (IOC) monitoring in the Phase II/V Rules. The nitrate monitoring requirements are stated in the Code of Federal Regulations 40 CFR 141.23, and can be found online at the Kansas Department of Health and Environment, Public Water Supply Section website

<http://www.kdheks.gov/pws/index.html>.

The purpose of this document is to provide a quick guide for collecting nitrate samples. A Phase II/V Rules Survival Guide is available online at the KDHE, Public Water Supply Section website <http://www.kdheks.gov/pws/index.html>, and is a more extensive guide on all facets of the Phase II/V Rules.

The Kansas Health and Environmental Laboratories (KHEL) is part of the Division of Environment under the Kansas Department of Health and Environment (KDHE).

The KHEL fee is \$7 for analyzing nitrate compliance samples.

### **What is in a Nitrate Sample Kit from KHEL?**

- 125 ml, round, white plastic bottle
- Pink return shipping label
- Sample submission form

Figure 1-NO3 is a picture of what is contained in a nitrate sample kit from KHEL. A barcode label on the sample collection bottle will have the system's KHEL account number and the bottle identification number. The pink return shipping label is to be placed on the outside of the package when ready to ship the sample back to KHEL. The green sample submission form must be completed for each nitrate sample.

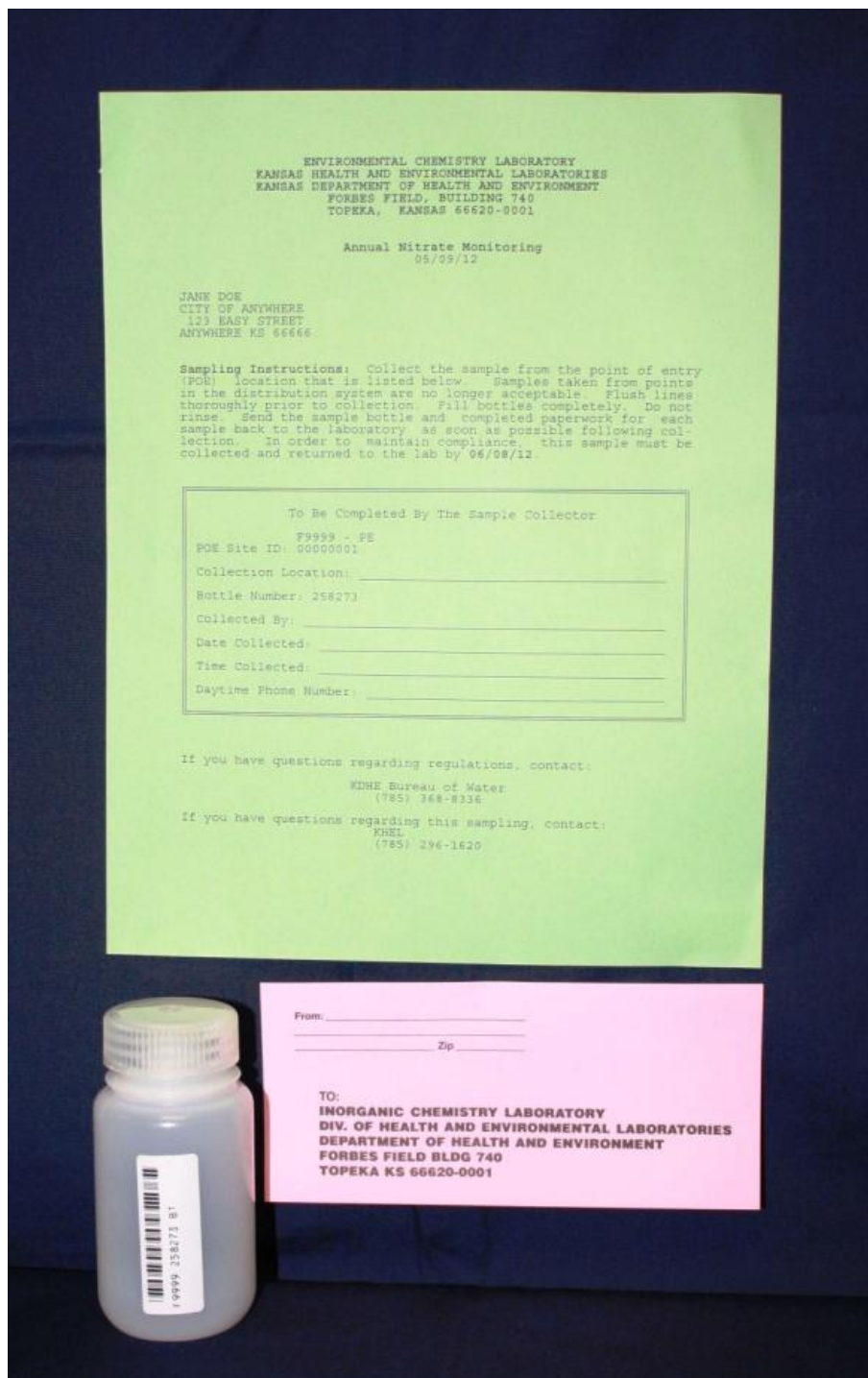


Figure 1-NO3. What Is Included With a Nitrate Sample Kit

Figure 2-NO3 is an example of a Nitrate Sample Submission Form

ENVIRONMENTAL CHEMISTRY LABORATORY  
KANSAS HEALTH AND ENVIRONMENTAL LABORATORIES  
KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT  
FORBES FIELD, BUILDING 740  
TOPEKA, KANSAS 66620-0001

Annual Nitrate Monitoring  
05/09/12

JANE DOE  
CITY OF ANYWHERE  
123 EASY STREET  
ANYWHERE KS 66666

**Sampling Instructions:** Collect the sample from the point of entry (POE) location that is listed below. Samples taken from points in the distribution system are no longer acceptable. Flush lines thoroughly prior to collection. Fill bottles completely. Do not rinse. Send the sample bottle and completed paperwork for each sample back to the laboratory as soon as possible following collection. In order to maintain compliance, this sample must be collected and returned to the lab by 06/08/12.

To Be Completed By The Sample Collector
F9999 - PE
POE Site ID: 00000001
Collection Location: _____
Bottle Number: 258273
Collected By: _____
Date Collected: _____
Time Collected: _____
Daytime Phone Number: _____

If you have questions regarding regulations, contact:

KDHE Bureau of Water  
(785) 368-8336

If you have questions regarding this sampling, contact:

KHEL  
(785) 296-1620

Figure 2-NO3. Example of a Nitrate Sample Submission Form

## THE NITRATE SAMPLE SUBMISSION FORM IN DETAIL

Figure 3-NO3 indicates the header of the form which indicates where the kit came from and the date it was shipped from KHEL. The address in the header is the address of KHEL and will match the address on the pink return shipping label that came with the kit.

ENVIRONMENTAL CHEMISTRY LABORATORY KANSAS HEALTH AND ENVIRONMENTAL LABORATORIES KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT FORBES FIELD, BUILDING 740 TOPEKA, KANSAS 66620-0001  Annual Nitrate Monitoring 05/09/12
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Figure 3-NO3. Header of the Sample Submission Form

Figure 4-NO3 indicates the system's address information printed on the form.

JANE DOE CITY OF ANYWHERE 123 EASY STREET ANYWHERE KS 66666
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Figure 4-NO3. System Address on the Sample Submission Form

Figure 5-NO3 indicates the sample collection instructions.

<b>Sampling Instructions:</b> Collect the sample from the point of entry (POE) location that is listed below. Samples taken from points in the distribution system are no longer acceptable. Flush lines thoroughly prior to collection. Fill bottles completely. Do not rinse. Send the sample bottle and completed paperwork for each sample back to the laboratory as soon as possible following collection. In order to maintain compliance, this sample must be collected and returned to the lab by 06/08/12.
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Figure 5-NO3. Sample Collection Instructions on the Sample Submission Form

Figure 6-NO3 has been highlighted to point out specific areas on the form. This section must be filled out completely and neatly for each nitrate sample. If there is a problem with the sample, KHEL personnel will call the sample collector and try to resolve it. However, if they are unable to make contact the sample may be rejected and the system will have to re-collect the sample.

The part highlighted in green will indicate the system's KHEL account number.

The part highlighted in purple is the point-of-entry (POE) identification number where the sample must be collected. The POE site ID number should match a KDHE identification tag number that is physically at the site where the sample should be collected.

The part highlighted in yellow has often caused confusion for samplers. It is the Local Name for the collection site. In our data base, systems have the option of giving the POE site a "Local Name," and printed on the form in this location (if anything) is whatever the system requested as the Local Name.

The part highlighted in blue indicates the identification number of the bottle that came in the kit. The bottle ID number on the barcode label and on the sample submission form should always match. If they don't match, call KHEL at 785-296-1620 and notify them of the situation.

To Be Completed By The Sample Collector	
	F9999 - PE
POE Site ID:	00000001
Collection Location:	
Bottle Number:	258273
Collected By:	
Date Collected:	
Time Collected:	
Daytime Phone Number:	

Figure 6-NO3. Collection Site ID and Bottle ID on the Sample Submission Form

## **COLLECTING AND SHIPPING THE NITRATE SAMPLE**

The sample kit will specify a time frame in which to collect the sample. Collecting within the appointed time frame is to the system's benefit and has been coordinated with the system's compliance monitoring due date.

### **Collecting the Nitrate Sample**

Read through the sample collection instructions before collecting. For questions or concerns about the sample collection process, call KHEL at 785-296-1620 for assistance.

Nitrate compliance monitoring samples are collected from finished water. Listed on the sample submission form is the POE site ID number where the sample needs to be collected. At the sample collection site there should be a KDHE ID tag with a number that matches the ID number on the form.

### **Shipping the Nitrate Sample**

As soon as possible after collecting the sample, place the container and the completed sample submission form in the shipping box and tape shut. Secure the pink return shipping label to the package.

If the sample container leaks it could arrive at KHEL empty or with not enough sample left to analyze. Many couriers will consider a wet package undeliverable and will discard it. Either of these scenarios would require the system to re-collect the sample.

## **SUMMARY OF NITRATE SAMPLING**

- Upon receipt of the sample kit, open and review the appointed sample collection date.
- Check that bottle ID numbers, KHEL account number, and collection site ID numbers are correct.
- Follow the sample collection instructions that are on the sample submission form.
- Fill out the sample submission form neatly and completely.
- Include the completed sample submission form in the package with the sample and ship as soon as possible after collection.
- Calling KDHE with questions or concerns you may have is highly encouraged.

For questions about your nitrate sample kit or the sample collection process, call KHEL at 785-296-1620.

For questions about your nitrate compliance or compliance monitoring schedule, call KDHE's Bureau of Water, Public Water Supply Section at 785-368-8336.